

HP StorageWorks Command View XP
Version 1.8C
Release Date: December 2004
Readme.txt/Readme.htm
Part Number: B9357-96094

=====
=====

=====
CONTENTS
=====

- 1.0 OVERVIEW
- 2.0 NEW FEATURES
- 3.0 DEFECTS FIXES
 - 3.1 New Defect Fixes for Command View XP
 - 3.2 New Defect Fixes for Path Connectivity
- 4.0 KNOWN ISSUES
 - 4.1 General limitations
 - 4.2 Viewing online help on HP-UX
 - 4.3 The list of managed XP disk arrays may be lost when upgrading soft
 - 4.4 Mozilla 1.2.1.01 on HP-UX 11.23 limitation when adding XP disk arrays in the Device Administration screen
 - 4.5 Multiple LAN card limitation
 - 4.6 The CV CLI "create host_group" command removes spaces in host group name input parameters
 - 4.7 Command View XP 1.8A (or later) and Performance Advisor XP 1.7 do not use the same JRE version
 - 4.8 Installing multiple JRE versions may cause Command View 1.8B applets to crash Internet Explorer
 - 4.9 OPEN-V CV CLI Support
 - 4.10 SSL Support for XP128/XP1024 GUI
 - 4.11 Auto LUN support for the XP48/XP512
 - 4.12 XP256 disk array limitations
 - 4.13 Flex Copy display limitation
 - 4.14 Installing and uninstalling license keys
 - 4.15 Multiple Path Connectivity instances in a SAN
 - 4.16 Not preserving original data in new Path Connectivity database
 - 4.17 The Connectivity Health Screen will not show physical path information for a Solaris host with Sun's Traffic Manager (MPxIO) enabled
 - 4.18 A "No such object in table" error may occur while accessing the Administration screens in Path Connectivity
 - 4.19 A Command View XP management station on Windows NT may fail to deploy host agents remotely
 - 4.20 Switch requirements
 - 4.21 Path Connectivity Host Agent installation
 - 4.22 Connectivity Health screen hyperlinks may not work
 - 4.23 Information Missing on Array Security LDEV View Pane
 - 4.24 Command View XP Path Connectivity Administration Truncate Log Function
 - 4.25 Path Connectivity Shows Exceptions to Set Number and Size of Log Files
 - 4.26 Broken Paths in the Path Connectivity - Connectivity

- Health Screen Disappeared After Data Collection
- 4.27 Command View XP Path Connectivity Manual "Add Host" Feature
- 4.28 Path Connectivity Manual Data Collection May Show Successful Pop-up Message Upon a Failed Host Collection
- 4.29 Colon in device names causes loss of device list
- 4.30 AIX and Solaris Support Unclear on Support Page
- 5.0 APPENDIX
- 5.1 Trap Distributor Files
- 5.2 Documentation for Command View XP

=====
1.0 OVERVIEW
=====

HP StorageWorks Command View XP is a Web-based storage management platform that monitors and configures the HP StorageWorks XP Disk Array family of products.

HP StorageWorks Path Connectivity XP is a component included with Command View XP. You can access Command View XP from remote locations using the Internet and a Web browser.

New features and defect fixes are summarized in sections 2.0 and 3.0. Section 4.0 discusses known issues and section 5.0 provides an appendix for miscellaneous information not covered in the previous sections.

=====
2.0 NEW FEATURES
=====

This version of Command View XP provides support defect fixes only for the XP disk arrays -- it does not provide any new features.

Unless otherwise noted in this document, all new features are described in the appropriate installation and user guides.

=====
3.0 DEFECT FIXES
=====

3.1 New Defect Fixes for Command View XP

This version of Command View XP fixes 12 defects by providing the following solutions.

New defect fixes concerning the GUI

- Command View XP now correctly displays the date and time for events in the Event Notification window.
- Command View XP now refuses to re-process notification rules

concerning events that have been notified in the past.

- Command View XP no longer sets Script notification rules to default values after Command View XP is restarted. The array and category rules are processed first, before the notification rules.
- A configurable parameter has been added to prevent an RMI method call from timing out the connection with the RMI server when a large amount of configuration data must be read from the array. If you encounter an error in data retrieval, please contact your HP support representative for more information on adjusting this new parameter.
- TrapDecoder will no longer incorrectly forward certain Refcodes.
- Command View XP now correctly decodes the SNMP traps for the disk drive name of XP48, XP128, and XP1024 disk arrays.

New defect fixes concerning the CLI

- Command View XP now correctly retrieves data related to Disk ID's for all parity groups defined on an XP128 array.
- When there are newly added traps whose names have not yet been decoded, then for some traps, the list traps -s command in the Command View XP CLI now displays the trap component name as "--".
- Command View XP now initializes global variables for every parity group and displays the correct size value for all parity groups.
- When the list traps CLI command is run, Command View XP now displays all the pending traps which were not decoded earlier.

3.2 New Defect Fixes for Path Connectivity

This version of Path Connectivity fixes two defects by providing the following solutions:

- The information in the Switch column of the Connectivity Health window is now displayed correctly.
- The Add Host feature allows you to record host data on hosts that do not have the Path Connectivity host agent running. Manually adding the hosts one-by-one using the "Add Host" feature in the Path Connectivity's Administration window may not add all the information into the database. Use the "Import Host" feature to add the host information.

=====

4.0 KNOWN ISSUES

The issues addressed in this section are known to exist for Command View XP and Path Connectivity.

4.1 General limitations

The following are not supported:

- No support for BC/CA configuration on the XP48/XP256/XP512
- No host agent, CLI, API, or online help support for mainframe systems
- No mainframe support on the XP48/XP256/XP512
- No support for Netscape browsers on Microsoft Windows platforms
- Duplicate events and notifications will occur for XP256/XP48/XP512 arrays as the timestamp is not supported in the firmware.

Issues concerning Command View XP

4.2 Viewing online help on HP-UX

The Command View online help may not load properly on HP-UX operating systems using Netscape. If this occurs, reload the frame by right-clicking the grayed frame on the left hand side and clicking Reload Frame.

4.3 The list of managed XP disk arrays may be lost when upgrading software

If you are upgrading from Command View XP 1.51 or earlier, Command View XP will lose the list of managed XP disk arrays during the upgrade process. To minimize impact of this constraint, record network related information about the XP disk arrays managed by Command View XP prior to upgrading, and then manually add the XP disk arrays afterwards.

4.4 Mozilla 1.2.1.01 on HP-UX 11.23 limitation when adding XP disk arrays in the Device Administration screen

If you are using Mozilla 1.2.1.01 on HP-UX 11.23 and you try to add an XP disk array using the Device Administration screen by entering the IP address, data does not populate the form and field labels do not display properly on some pages.

To work around this problem, add the XP disk array by using any of the other supported operating systems and browsers, or by using the "create device" CLI command. After adding the XP disk array through one of the supported methods, you can use Mozilla 1.2.1.01 on HP-UX 11.23 to complete any other configuration on an XP disk array.

4.5 Multiple LAN card limitation

If the Command View XP management station has two network cards installed, one card on an isolated LAN and another on a corporate LAN, the client may have trouble connecting to the management station if the primary card mapped to the local host is on a different LAN than the client.

To solve this issue, configure the first LAN card to communicate with the hosts and Command View XP API clients on the SAN. To set the LAN card as the first network card, modify the bindings order of the network adapters to bind that network card first. This procedure is explained in the installation guide.

4.6 The CV CLI "create host_group" command removes spaces in host group name input parameters

If the "create host_group" command removes spaces in host group name input parameters, use the host group names with no spaces in the CLI.

4.7 Command View XP 1.8A (or later) and Performance Advisor XP 1.7 do not use the same JRE version

Performance Advisor 1.7 uses an older JRE version than the JRE version supported by Command View XP 1.8A (or later). Using an older JRE than the one supported for the particular Command View XP release may cause web client display problems. To solve this, obtain Performance Advisor XP 1.7-2 or later and follow the upgrade instructions provided with the product.

4.8 Installing multiple JRE versions may cause Command View 1.8B applets to crash Internet Explorer

In Windows, installing an older or unsupported JRE after installing the supported JRE may cause the Command View XP web client running on that system to crash. First, verify the order you installed the JRE versions and if necessary, uninstall and re-install JRE 1.4.2. Complete the following:

1. Check the timestamps of the JRE installation folders. The JRE 1.3.1 installation folder path is <JRE-install-directory>/JavaSoft/JRE/1.3.x. The JRE 1.4.2 installation folder path is <JRE-install-directory>/Java/j2re1.4.2.

- If the JRE 1.3.x installation folder has a more recent timestamp than the JRE 1.4.2 installation folder, continue to the next step.
2. If you are solving the problem on the management station, stop all Command View XP or Performance Advisor XP services.
 3. Uninstall JRE 1.4.2.
 4. Download and install JRE 1.4.2 from the Sun Web site.
 5. If you are solving the problem on the management station, restart all Command View XP or Performance Advisor XP services before using either application.

4.9 OPEN-V CV CLI Support

At this time, OPEN-V is not fully supported by the CLI, but is supported by the Command View XP GUI. The CLI will display OPEN-V volumes, but will not create OPEN-V volumes.

4.10 SSL Support for XP128/XP1024 GUI

Starting with firmware version 21.07.04, SSL is supported on the Web server on the SVP, but when used with Command View XP, GUI cannot successfully provide access to the XP disk array. Therefore, SSL is not supported at this time in this configuration.

4.11 Auto LUN support for the XP48/XP512

For active management of Auto LUN on the XP48/XP512, HP recommends using Remote Control XP instead of the Command View XP GUI because Remote Control provides significantly quicker performance.

4.12 XP256 disk array limitations

Due to performance limitations, we do not recommend use of HP StorageWorks Command View XP to actively manage XP256 disk arrays, but only to monitor their usage.

The Remote Control software accompanying the purchase of HP Surestore Command View XP for the XP256 array may be used successfully to actively configure the XP256 disk array.

Remote Control XP is available as B9357AD, Command View Remote Control LTU U/G.

4.13 Flex Copy display limitation

LUNs and ports that are part of Flex Copy pairs will not be displayed under the CLI, APIs, or in the GUI Status Pages.

4.14 Installing and uninstalling license keys

If you are unable to install or uninstall license keys for the XP48 and XP512 disk arrays using the Licensing Management feature, contact your HP support representative for assistance with installing the license key directly on the array.

Issues concerning Path Connectivity

4.15 Multiple Path Connectivity instances in a SAN

When communicating to an XP48/XP256/XP512, if you have multiple Command View management stations configured in your SAN environment to manage the same SAN resources, Path Connectivity's "Data Collection Service" may conflict each other. For instance, the Path Connectivity Diagnosis function either hangs or takes a very long time to complete.

To work around this issue, disable the Path Connectivity "Data Collection Service" on one of the management stations. To do this, go to the Windows Services, right-click "HpssDataCollectorService," and click Stop.

4.16 Not preserving original data in new Path Connectivity database

If you are upgrading from Command View XP 1.40 or earlier, the installation process will not preserve the user-entered database data. The database content will be lost during the upgrade process.

4.17 The Connectivity Health Screen will not show physical path information for a Solaris host with Sun's Traffic Manager (MPxIO) enabled

The Connectivity Health screen provides a table of the paths and path connectivity health statuses between hosts and XP disk arrays. However, for a Solaris host with Sun's Traffic Manager (MPxIO) enabled, the Connectivity Health screen will show a pseudo HBA WWN and a logical path between this pseudo HBA port to the XP disk array.

4.18 A "No such object in table" error may occur while accessing the Administration screens in Path Connectivity

A "No such object in table" error may occur while accessing the Administration screens in Path Connectivity. This error

could occur when attempting to manually add a host on the Host Discovery - Host Management screen or other Path Connectivity Administration feature combined with a subsequent network delay or timeout during the requested operation.

To resolve this issue, you need to restart the HPSSE2ETomcat service.

You can choose to either restart the Command View XP services through the Start menu:

Note: The following procedure stops and restarts ALL Command View services and will affect processes that are currently making changes to disk array configurations.

- Click Start > Programs > HP StorageWorks Command View XP > Restart Services.

OR

Restart the HPSSE2ETomcat service remotely:

1. Become a member of the <CVXP management server>\Administrators group.
2. From the Control Panel, click Administrator Tools > Computer Management > Action > Connect to another computer, and then connect to <CVXP management server>.
3. From the Control Panel, click Administrator Tools > Computer Management > Services and Applications > Services.
4. Stop and Start the HpssE2ETomcat service.

Or use the REXEC service:

- rexec <CVXP management server> [-l username] [-n] "NET STOP HpssE2ETomcat"
- rexec <CVXP management server> [-l username] [-n] "NET START HpssE2ETomcat"

4.19 A Command View XP management station on Windows NT may fail to deploy host agents remotely

If the only management station is on a Windows NT machine, we recommend that you deploy the host agent locally. Refer to the installation guide for further details on installing the host agent locally.

4.20 Switch requirements

The Path Connectivity module does NOT support the Cisco family of switches.

The Path Connectivity module does support the following switches:

- Brocade 2400
- Brocade 2800
- HP Surestore FC switch 6164 (32/62 ISL Ports)
- HP Surestore FC 1Gb/2Gb Switch 16B
- HP Surestore FC 1Gb/2Gb Switch 8B
- HP Surestore FC 1Gb/2Gb Entry Switch 8B
- HP StorageWorks SAN Switch 2/8 EL, 2/8 power pack
- HP StorageWorks SAN Switch 2/16, 2/16 power pack, 2/16-EL
- FC SAN Switch 2/8, 2/16 (3200/3800)
- HP StorageWorks SAN Switch 2/32, 2/32 power pack
- HP StorageWorks Core Switch 2/64, 2/64 power pack
- HP StorageWorks SAN switch 2/8V, 2/8V power pack, 2/8V GSA, 2/8V GSA power pack
- HP StorageWorks SAN switch 2/16V, 2/16V GSA
- HP StorageWorks SAN Switch 2/16N FF, 2/16N power pack, 2/16N FF GSA, 2/16N FF GSA power pack
- HP StorageWorks SAN Director 2/128, 2/128 power pack
- HP Surestore Director FC-64
- HP StorageWorks Director 2/64, 2/140
- HP StorageWorks Edge Switch 2/16, 2/24, 2/32, 2/64
- HP StorageWorks Edge Switch 2/12
- McDATA ES-3016, ES-3032
- McDATA ED-5000

4.21 Path Connectivity Host Agent installation

If your hosts have host agent with version of Command View XP 1.7B or earlier, you will need to update your host agent version to CV 1.8A or later in order to use Path Connectivity. If your hosts have CV 1.8 host agent installed, you do NOT need to update your host agent. For Windows Server 2003 (32-bit), you must perform a fresh local installation of the corresponding host agent.

The update and install functions using the remote deployment tool are not supported for host agents on Windows. For host agents installed using Command View XP version before Command View XP 1.6, please uninstall the old host agent locally and then install the new host agent. For host agents installed using Command View XP 1.6 and later, you can locally install the host agent by invoking the install script in the local install package without uninstalling first.

For detailed instructions regarding the local installation and uninstallation procedures, please refer to the HP StorageWorks Command View XP Installation Guide.

4.22 Connectivity Health screen hyperlinks may not work

In the Connectivity Health screen under Path Connectivity, some hypertext links in the diagnostics result report frame, may not take you back to the main Connectivity Health screen when clicked. Click the Connectivity Health button near the top of the frame to return to the main Connectivity Health screen.

4.23 Information Missing on Array Security LDEV View Pane

The Array Security LDEV View pane is missing LUN data.

Workaround:

The lun data for a particular cu and ldev is available in both the Command View XP CLI and GUI:

The data can be obtained in the CV CLI by executing the command
list lun ex: list lun -port 1F -cu 2 -ldev 82.

The data can be viewed through the GUI by navigating to Lun Management->Lun Manager-Lu Path pane and selecting the specific port and host under the host group.

4.24 Command View XP Path Connectivity Administration Truncate Log Function

Problem occurs with the Truncate Log function under the Path Connectivity Administration pane. The log is not truncated and an additional exception is returned in the event log due to this action.

Workaround:

To truncate, perform the following steps:

1. Stop the DCS service by going to Windows Service Administrative Tool and selecting "HpssDataCollectorService."
2. Press the stop symbol.
3. Delete the DataCollectorService.log in the <Install Drive>\HPSS\DataCollectorService\logs directory.
4. Start the DCS service by going to the Windows Service Administrative Tool. Select "HpssDataCollectorService" and click the Start symbol.

4.25 Path Connectivity Shows Exceptions to Set Number and Size of Log Files.

When the HpssDataCollectorService is restarted, you may see two exceptions in the Path Connectivity event logs:

- 1.DataCollectorServiceConfiguration::setMaxLogFile
Size(String)java.lang.NullPointerException
2. DataCollectorServiceConfiguration:
:setMaxLogBackupIndex(String)
java.lang.NullPointerException

Due to this issue, the number of Data Collector Service log for Path Connectivity is fixed to 4 and the size of each log is fixed to 64MB as maximum. No workaround is offered at this time.

4.26 Broken Paths in the Path Connectivity - Connectivity

Health Screen Disappeared After Data Collection

Beginning with Command View XP 1.8B, paths that have been broken (for example, due to the disconnection of an FC cable) will disappear after the next successful Path Connectivity data collection. If the paths become valid again, they will reappear after the next successful data collection.

When a path is broken, an event will be sent out. You can use the Event Notification module to receive the events:

1. Click on Event Notification in the Command View XP main window.
2. Click on Event under History in the left menu of Event Notification pane.
3. Select the category "Path Connectivity" and then select the "Serious" checkbox and appropriate time in the right side of the Event pane.
4. Table containing events about the change in path health will be displayed with Event description, Date, Status, HostIPAddress, Hostname, Hostportwnn, Portstate, ArraySerialNo, ArrayProductname, Arraymodel, Arrayportname, Arrayportwnn.
5. To get e-mail notification for these events, please see the user guide or online help for Event Notification.

4.27 Command View XP Path Connectivity Manual "Add Host" Feature

The Add Host feature allows you to record host data on hosts that do not have the Path Connectivity host agent running. Manually adding the hosts one-by-one using the "Add Host" feature under Path Connectivity's Administration screen may not add all information into the database. Use the "Import Host" feature to add the host information.

4.28 Path Connectivity Manual Data Collection May Show Successful Pop-up Message Upon a Failed Host Collection

The Path Connectivity Collect Data Now function may return a successful message for a host collection on existing hosts even though the collection may have failed. Ensure that there are no ERROR events shown in the Path Connectivity event log after a manual data collection.

4.29 Colon in device names causes loss of device list

If you enter a colon in a device name for an array, the device list will be lost the next time you reboot the management station and start Command View XP.

Workaround: Do not include colons in device names.

4.30 AIX and Solaris Support Unclear on Support Page

The Support page includes links for downloading Path Connectivity Host Agent packages. The "Solaris platform" and "AIX UNIX platform" links may incorrectly imply that all platform versions are supported.

Please note that Command View XP specifically offers Host Agent support for AIX versions 4.3.3 and 5.1 and Solaris versions 8 and 9 as documented in the HP StorageWorks Command View XP 1.8C Installation Guide.

=====
5.0 APPENDIX
=====

The information contained within this appendix is information pertinent to Command View XP not covered elsewhere in the documentation.

5.1 Trap Distributor Files

In addition to \HPSS\TrapDistributor\conf\RefCodeToErrorMsg.conf, there are four Trap files in the \hpss\dm\tomcat\webapps\hpstmgmt\web-inf\cvapi\config directory:

- XP128RSimFile.txt: Traps for XP128/1024
- XP256RSimFile.txt: Traps for XP256
- XP512RSimFile.txt: Traps for XP512
- XP48RSimFile.txt: Traps for XP48

Trap Distributor refers to these files first to find the R-SIM trap. If Trap Distributor does not find there, it refers to \HPSS\TrapDistributor\conf\RefCodeToErrorMsg.conf.

5.2 Documentation for Command View XP

All Command View XP product documentation is provided on the Command View XP documentation CD delivered with this version.

Although some of the documents contained on the documentation CD are not labeled with version 1.8C, all documents apply to Command View XP 1.8C.